HyperVentilate Info, June 1997
EPA Office of Underground Storage Tanks

Please note: You have to get additional software, "Plus Runtime for HyperVentilate," to run the Windows version. It is available from ObjectPlus Corp. (617/491-7575) for about \$105 (includes standard shipping).

WHAT IS HYPERVENTILATE?

HyperVentilate is user-friendly software that can help you use vapor extraction (soil venting) technology. This software guides the user through a structured thought process to:

- * Identify and characterize required site-specific data,
- * Decide if soil venting is appropriate at the site,
- * Evaluate air permeability test results,
- * Calculate the minimum number of extraction wells needed, and
- * Show how results at the site may differ from the ideal case.

HyperVentilate will not completely design your vapor extraction system, tell you exactly how many days it should be operated, or predict the future. HyperVentilate is both an educational tool for the novice environmental professional and a functional screening tool for more experienced users. It performs necessary calculations and contains "help cards" that define the equations used, make the necessary unit conversions, and give supplementary information on related topics. In addition, HyperVentilate contains a list of 62 compounds that can be updated by the user to a maximum of 400 compounds. More sophisticated programs are now available, but HyperVentilate is a good rule-of-thumb tool.

WHAT DO I NEED TO RUN IT?

HyperVentilate v1.01 for the Apple Macintosh requires an Apple Macintosh (Plus or higher) equipped with at least 1 MB RAM (2 MB preferred) and the Apple HyperCard software program (2.0 or greater).

HyperVentilate v2.0 for Microsoft Windows and Plus requires an IBM PC-compatible computer with an 80386 or higher processor, 4 MB RAM minimum, VGA or 8514 video drivers, and a hard disk with at least 4 MB of free space. The software requirements are DOS 5.0 or higher, Microsoft Windows 3.1 or later, and Plus Runtime for HyperVentilate. Plus Runtime for HyperVentilate, formerly Spinnaker Plus, is handled by ObjectPlus Corp., (formerly a division of Spinnaker Software).

HOW DO I GET IT?

The users manual and software, for Mac or Windows/Plus (but not including Plus Runtime for HyperVentilate) is posted for free downloading on the World Wide Web and on two EPA electronic bulletin boards:

* http://www.epa.gov/OUST/cat/hyperven.htm;

* CLU-IN: (301)589-8366 (or 589-8368 for system operator); and

* ATTIC: (513)569-7610 (or 569-7272 for system operator).

EPA's Office of Research and Development published a report titled "Decision Support Software for Soil Vapor Extraction Technology Applications: HyperVentilate," EPA/600/R-93/028 (which includes the Users Manual). The 1993 research report includes an overview of soil vapor extraction principles and procedures, a case study of an application of the HyperVentilate software, and a sensitivity analysis of the software's output. The report is available from National Technical Information Service with or without a pair of disks with the HyperVentilate software for Macintosh and for Windows/Plus (without Plus Runtime software). NTIS is at (703)487-4650. The package with report and both disks is order number PB-93-502664/AS, \$140; the report alone is order number is PB-93-134880/AS, \$27.

SOFTWARE INSTALLATION PROCEDURE

For Mac, merely copy files to folder on hard disk containing HyperCard. Double-click on "Soil Venting Stack" icon to run.

For IBM-compatibles, a discussion follows on how to load both Plus and HyperVentilate

* Loading HyperVentilate

* Loading Plus

* Creating the Plus Icon

* Opening HyperVentilate

These instructions presume that the user has a working knowledge of Microsoft Windows. For these instructions, the 3.5-inch drive from which you will be installing the programs is assumed to be the A drive).

Loading HyperVentilate

The HyperVentilate package contains one 3.5-inch diskette.

- 1. Enter Windows.
- 2. Double-click on the "Main" window icon (if this window is not already open).

- 3. Double-click on the "File Manager" icon; this will display a directory tree window.
- 4. Insert Disk 1 into the A drive.
- 5. In the upper left corner of the directory tree window you will see symbols representing the drives on your system. Click on drive A.
- 6. Click on the A:\ folder icon so that it is highlighted and/or a dotted line appears around it.
- 7. Click on "File" and drag down to the "Copy" command. The "Copy" window will appear.
- 8. The curser will be located at the "To" path. Type in "C:\WINDOWS\PLUS"; click on "OK."
- 9. When the installation is complete, exit from "File Manager."

Loading Plus

Use these steps to install the program:

- 1. Follow steps 1-5 under Loading HyperVentilate above.
- 2. Two windows are now showing, your hard drive window and your disk drive window. You may have to click on "Window" and drag to "New Window" to display second window. Press Shift+F4 to see them tiled.
- 3. Click on the A:\ folder of your disk drive and drag it to the C:\WINDOWS\PLUS directory on your C drive. The files will be copied there.
- 4. Exit the "File Manager."

Creating the Plus Icon

- 1. Close all windows so that the "Program Manager" window is the only one displayed on your screen.
- 2. At the bottom of the window, there will be program icons displayed for "Main," "Accessories," and others. Is there a program icon named "Windows Applications" (or something similar)? If yes, double-click on it and go to Step 3. If no, continue with Steps 2a-c to create one.

2a. Click on "File" and drag down to "New." A window called "New Program Object" will appear.

2b. Check to make sure "Program Group" is selected; click on "OK."

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